# The environment directs our genes

One would expect a great achiever in the sciences to be an atheist. After years of objective scientific inquiry and research, your typical Ph.D. would have no need for the existence of a god to explain the state of things past, present, or future.

Of course this is only a generalization. Many scientists are not atheists, and A.E. Wilder-Smith, a recent visitor to the University of Alberta, is one such person.

Wilder-Smith's achievements include a doctorate in each of organic chemistry, chemotherapy, and pharmacology. He has done cancer research, professorial duty in Europe and the U.S., and now spends a large part of his time lecturing against drug abuse. He spoke last Wednesday in SUB Theatre, addressing the question, "Is Man Environmentally or Genetically Controlled?"

Wilder-Smith calls it "the debate that is going on with sweat and blood between the Fascists and the Marxists." The Marxists, he said, believe the environment conditions us, and that if you put a person

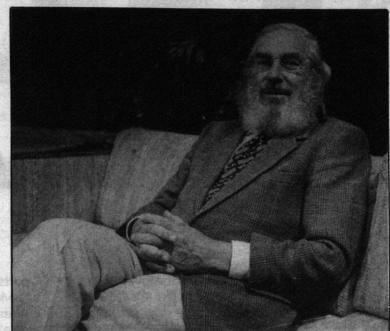


photo Greg Halinda Dr. A.E. Wilder-Smith.

inavian blood for that reason."

Despite this analogy, Wilder-Smith kept his talk on a scientific level, avoiding political or religious arguments. He stressed that a

Wilder-Smith said that to believe that the genetic code is randomly-

He drew the analogy of a Mercedes-Benz versus the materials it is made of. Simply to bring together the metal, glass, rubber, and plastic in their raw forms does not logically assume a Mercedes will result. A source of intelligence to craft the

Likewise, to assume that the proteins and phosphates that constitute DNA bear the information to make the molecule mean "life" simply out of their existence in some ordering would be unscientific. "Life cannot consist of just chemistry and physics,"said Wilder-

Wilder-Smith criticized American scientist Carl Sagan's search for extra-terrestrial intelligence. Sagan, in "pointing his little radio telescope to the heavens", is looking for nonrandom sequences in radio signals that are decodeable.

Sagan thinks if he can attach to these sequences some "language convention", the sequences will betray intelligence.

Wilder-Smith says this language convention already exists as the genetic code.

That which he's looking for in the skies is right under his nose, under the electron microscope. And we have decoded it. We know how to code. We know how to put in information and manipulate

Getting back to environment and its influence on genetic development, Wilder-Smith said, "If you put the environment right, the genes will act right." He gave the example of the nurturing effect of a mother on her children and its relation to brain development.

In an experiment with laboratory

rats, 10 offspring were produced. All were fed the same mother's milk, but five lived in isolation from the mother and each other.

Wilder-Smith said that after development the 10 rats were given "intelligence" tests. The rats who were brought up in the family atmosphere tested 33 per cent "smarter". "The environment of the family stimulated the development of the brain," said Wilder-Smith.

Though Dr. Wilder-Smith advocates genetic engineering to help fight disease, the environment he is most concerned with is the human one. "The environment wants looking after, particularly the school and university environment, which have got very, very polluted in what they teach . . . it's not science," he said after the present-

Wilder-Smith was disappointed with the student turnout at his lecture. "In Europe and the U.S. students come out for these things, he said. Despite a less-than-full SUB Theatre, a stimulating and lengthly question session followed the lecture.

### "Life cannot consist of just chemistry and physics."

into a paradise, they'll "turn out to be an angel, and an atheist of course.

The fascists believe man is genetically controlled, and that if you're going to make anything of a nation you've got to update their genetics," said Wilder-Smith. "That's what Hitler did, you see, he tried to update the genetics with Scandscientific approach to analyzing the DNA molecule, the "building block of life," would refute the ideas of Charles Darwin.

"Once you see what the genetic code is in principle," said Wilder-Smith, "you have no difficulty in understanding how the environment influences the expression of

created, and they say that intelligence is born of that, is unscientific.

raw material into a car is missing.

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### Athletes who refuse to submit cannot compete

# U of C drug-tests its athletes

CALGARY (CUP) - Caught up in the Olympic spirit, the University of Calgary has decided to test all intercollegiate athletes for drugs banned by the International Olympic Committee.

The U of C General Faculties Council (GFC) approved of a policy Oct. 24 that would allow the university to test 330 U of C athletes participating in Canadian Intercollegiate Athletics Union sports.

Under the new policy, athletes who refuse to submit to the mandatory test will be ineligible for training or competition.

The universality of the test was made possible courtesy the Calgary Olympic Committee, which is organizing the 1988 Winter Olympics.

Robert Corran, director of university sport programs, said if the committee were not paying for a new drug testing lab at the Foothills Hospital, "it would have been extremely difficult, if not impossible to test on the level we want."

The university had planned to test fewer athletes until the Foothills lab indicated it wanted to practice drug testing procedures for the Olympics.

The only other Canadian lab which conducts the tests is in Montreal. Athletic directors at other universities say the \$200-\$300 per student per test price is too expensive.

Corran said once the testing discount at the Foothills ends, the university will test 50 to 60 athletes a year, either randomly or only newcomers to university athletic programs.

But one of a handful of GFC representatives who oppose mandatory drug testing said he was "troubled" by the policy.

"It's rather as if we randomly

searched students going into exams to make sure they weren't cheating," said Michael McMordie of the faculty of Environmental De-

The policy says the university's athletics program "does not intend to unsurp the role of civil and criminal authorities with respect to the non-medical use of drugs that do not appear on the list of international (sports) federations of the

The major categories of drugs

used to enhance performance and banned by the IOC include stimulants, beta-blockers (used to slow body functions, including pulse rates), narcotic analgesics (such as codine, used to stop swelling), anabolic steroids and diruretics (used by athletes who wish to compete in another weight class).

We are not interested in recreational drugs per se," said Corran. There is a tremendous difference in terms of intrusion into student

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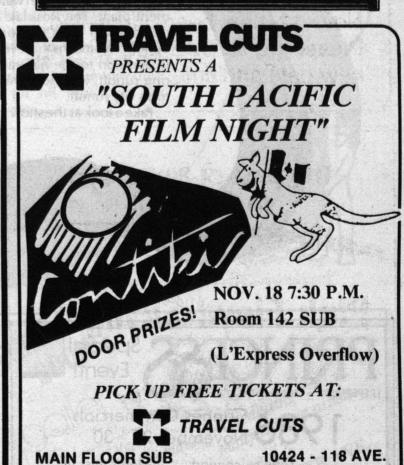
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